In the Claims:

1. (Currently Amended) A method for discriminating $p16^{INK4a}$ overexpressing metaplasias from $p16^{INK4a}$ overexpressing neoplastic or ~~preneoplastic~~ dysplastic lesions in a ~~biological~~ uterine cervix sample in the course of cytological testing procedures comprising:

   a. determining the presence or absence of cells overexpression of $p16^{INK4a}$ in said ~~biological~~ sample;

   b. determining the presence or absence of cells expressing at least one high risk HPV gene-product in said ~~biological~~ sample, wherein the high risk HPV gene-product is a polypeptide; and

   c. assessing simultaneous presence of cells expressing the high risk HPV ~~gene-products with~~ gene-product and cells overexpressing $p16^{INK4a}$, or the presence of cells overexpressing $p16^{INK4a}$ alone;

   wherein the simultaneous presence of cells expressing the high risk HPV ~~gene-products with~~ gene-product and cells overexpressing $p16^{INK4a}$ is indicative ~~for~~ of neoplastic or ~~preneoplastic~~ dysplastic lesion, and the presence of cells overexpressing $p16^{INK4a}$ alone is indicative of metaplasias.

2. (Currently Amended) The method according to claim 1, wherein the high risk HPV ~~gene-products are predominantly~~ gene-product is expressed in ~~early~~ neoplastic and/or ~~preneoplastic~~ dysplastic lesions.

3. (Currently Amended) The method according to claim 1, wherein ~~at least one of~~ the high risk HPV ~~gene-products~~ gene-product is encoded by the HPV E7 gene.

4. (Withdrawn-Currently Amended) The method according to claim 1, wherein ~~at least one of~~ the high risk HPV ~~gene-products~~ gene-product is encoded by HPV E2 and/or E6 genes.

5. (Withdrawn-Currently Amended) The method according to claim 1, wherein ~~at least one of~~ the high high risk HPV ~~gene-products~~ gene-product is encoded by HPV L1 and/or L2 genes.

6-7. (Cancelled)

8. (Currently Amended) The method according to claim [[7]] 1, wherein the neoplastic or dysplastic lesion ~~of the anogenital tract~~ is a lesion of the uterine cervix.

9-10. (Cancelled)

11. (Currently Amended) The method according to claim ~~10~~ 1, wherein the ~~biological~~ sample is a ~~Pap-smear~~ Pap smear or a cytological preparation of the cervix uteri.

12. (Previously Presented) The method according to claim 1, wherein the detection of the HPV gene-products and of $p16^{INK4a}$ is performed using one or more probes specific for the HPV gene-products and $p16^{INK4a}$.

13, (Previously Presented) The method according to claim 12, wherein the probe is detectably labelled.

14. (Previously Presented) The method according to claim 13, wherein the label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.

15. (Currently Amended) The method according to claim 12, wherein the probe is a polypeptide ~~and/or a nucleic acid~~.

16. (Previously Presented) The method according to claim 15, wherein the probe is an antibody directed against a high risk HPV encoded gene-product or $p16^{INK4a}$.

17. (Original) The method according to claim 16, which comprises an immuno-cytochemical staining procedure.

18-21. (Cancelled)

22. (Currently Amended) The method according to Claim 15, wherein detection of the high-risk HPV ~~gene-products~~ gene-product and $p16^{INK4a}$ is carried out ~~using nucleic acid probes and polypeptide probes~~ simultaneously.

23. (Currently Amended) The method according to claim 1, wherein the high risk HPV ~~gene-products are gene-products~~ gene-product is gene-product of the cancer associated HPV subtypes HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56 or 58.

24. (Currently Amended) The method according to claim 1, wherein overexpression of $p16^{INK4a}$ ~~simultaneous to~~ and expression of at least one high risk HPV ~~gene-products~~ gene-product is simultaneous determined in at least one single cell ~~is determined~~.

25-26. (Cancelled)

27. (New) The method according to Claim 1, wherein the presence or absence of cells overexpression of $p16^{INK4a}$ and the presence or absence of cells high risk HPV gene-product is determined on a slide preparation.